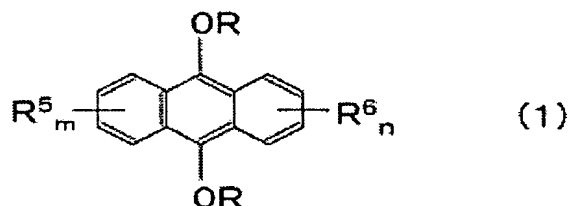


## CLAIMS

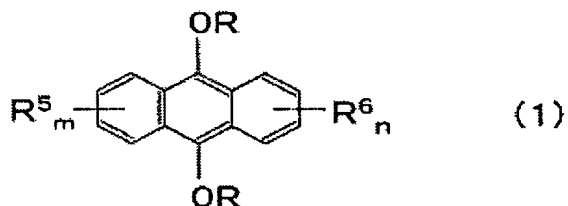
1. A process for producing an anthracene diether represented by the following formula (1):



- (wherein R is an alkyl group, an allyl group, an aryl group, a benzyl group, a hydroxyalkyl group or an alkoxyalkyl group, each of  $R^5$  and  $R^6$  is a substituent inert to etherification, and each of m and n is an integer of from 0 to 4), which comprises reacting an etherifying agent and an alkali salt of a 9,10-anthracenediol compound to produce the anthracene diether, characterized in that an aqueous medium containing the alkali salt of a 9,10-anthracenediol compound is added to an organic solvent containing the etherifying agent to carry out the reaction.
2. The process for producing an anthracene diether according to Claim 1, wherein the etherifying agent is one selected from dialkyl sulfates, alkyl halides, aryl halides or allyl halides.
3. The process for producing an anthracene diether according to Claim 1 or 2, wherein the organic solvent is one selected from polar solvents.
4. The process for producing an anthracene diether according to Claim 3, wherein the polar solvents are

those selected from aprotic polar solvents.

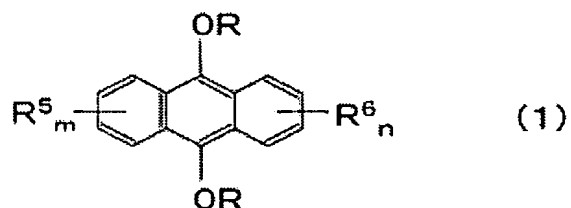
5. A process for producing an anthracene diether represented by the following formula (1):



5 (wherein R is an alkyl group, an allyl group, an aryl group, a benzyl group, a hydroxyalkyl group or an alkoxyalkyl group, each of  $\text{R}^5$  and  $\text{R}^6$  is a substituent inert to etherification, and each of m and n is an integer of from 0 to 4), which comprises reacting an  
 10 etherifying agent and an alkali salt of a 9,10-anthracenediol compound to produce the anthracene diether, characterized in that an aqueous medium containing the alkali salt of a 9,10-anthracenediol compound and an organic solvent containing the etherifying agent are  
 15 mixed in the presence of a quaternary ammonium compound or a quaternary phosphonium compound to carry out the reaction.

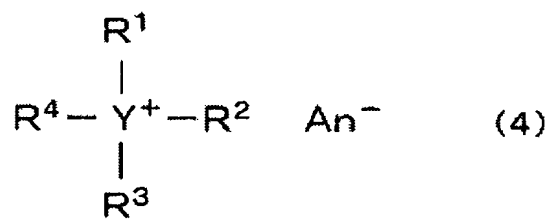
6. The process for producing an anthracene diether according to Claim 5, wherein the aqueous medium  
 20 containing the alkali salt of a 9,10-anthracenediol compound is added to the organic solvent containing the etherifying agent to carry out the reaction.

7. A process for producing an anthracene diether represented by the following formula (1):



(wherein R is an alkyl group, an allyl group, an aryl group, a benzyl group, a hydroxyalkyl group or an alkoxyalkyl group, each of  $\text{R}^5$  and  $\text{R}^6$  is a substituent inert to etherification, and each of m and n is an integer of from 0 to 4), which comprises reacting an etherifying agent and an alkali salt of a 9,10-anthracenediol compound to produce the anthracene diether, characterized in that an aqueous medium containing the alkali salt of a 9,10-anthracenediol compound is added to an alkyl halide in the presence of a quaternary ammonium compound or a quaternary phosphonium compound to carry out the reaction.

8. The process according to Claim 5, 6 or 7, wherein as the quaternary ammonium compound or the quaternary phosphonium compound, a quaternary ammonium compound or a quaternary phosphonium compound represented by the following formula (4):



(wherein each of  $R^1$  to  $R^4$  which are independent of one another, is a low molecular weight or high molecular weight organic group, particularly a substituted or unsubstituted alkyl, cycloalkyl or aryl group, Y is a nitrogen atom or a phosphorus atom, and  $An^-$  is an anion) is used.